

field such as mobile radio communication, and thus it is not necessary to extremely increase the coding rate. Therefore, the CRC block length is as short as at most 10 bits (the path memory length is about 20 bits), and the coding rate may be about 8/10. In practice, however, since the conventional system employs a combination of a convolution code of rate 1/2 as a code for constructing the trellis diagram in addition to the CRC code, the coding rate of the whole system is substantially as fairly low as 4/10. For the magnetic recording, the coding rate of the whole system is required to be 8/9 or more for high-density recording. Thus, the CRC block length for this purpose becomes very long (more than about 100 bits), and thus the LVA detector that needs a path memory length longer than that cannot be practically constructed since the processing delay becomes remarkably large.--

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Delete the paragraph on page 12, lines 7-11, and replace it with the following replacement paragraph:

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--In view of the above problems, it is an object of the invention to provide a digital magnetic recording/reproducing apparatus capable of maintaining the coding rate as high as 8/9 or more, and performing higher-density recording than in the prior art.--

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